

CLAIMS

- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Cancelled)
- 16. (Cancelled)
- 17. (Cancelled)
- 18. (Cancelled)
- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Cancelled)

Please add the following new Claims 22-24:

22. (New) An optical device capable of changing characteristics when subjected to localized heating comprising:

an optical waveguide; and

a material in contact with the waveguide wherein the contact area between the waveguide and the material defines an interface, the material being arranged to absorb a predetermined wavelength of light, the predetermined wavelength being at an energy level sufficient to heat the material,

wherein the material is arranged to transfer at least some of the heat to the interface to cause a permanent change in the optical properties at the interface, thereby reducing optically induced alterations of the waveguide whilst the device is exposed to the light.

23. (New) An optical device in accordance with claim 22, wherein the device is arranged to allow at least some of the heat transferred to the interface to vary the inherent stresses at the interface to reduce birefringence in the waveguide.

24. (New) An optical device capable of changing characteristics when subjected to localized heating, comprising:

an optical waveguide which is substantially transparent to a predetermined wavelength of light; and

b1 — a substrate formed on the contact area between the waveguide and the substrate defining an interface,

encl — the substrate being arranged to absorb the predetermined wavelength of light to cause localized heating at the interface,

— wherein the substrate is arranged to transfer at least some of the heat to the interface, the localized heating causing permanent changes in optical properties at the interface of the waveguide.
